

FACT SHEET

United States Environmental Protection Agency  
Region 10  
Park Place Building, 13th Floor  
1200 Sixth Avenue, WD-134  
Seattle, Washington 98101  
(206) 442-1214

Date: February 27, 1990

Permit No.: ID-002542-9

PROPOSED REISSUANCE OF A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
PERMIT TO DISCHARGE POLLUTANTS PURSUANT TO THE PROVISIONS OF THE CLEAN WATER ACT

CALLAHAN MINING CORPORATION  
(Caladay Project)

has applied for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit to discharge pollutants pursuant to the provisions of the Clean Water Act. This fact sheet includes (a) the tentative determination of the Environmental Protection Agency (EPA) to reissue the permit, (b) information on public comment, public hearing and appeal procedures, (c) the description of the current discharge, (d) a listing of tentative effluent limitations, schedules of compliance and other conditions, and (e) a sketch or detailed description of the discharge location. We call your special attention to the technical material presented in the latter part of this document.

Persons wishing to comment on the tentative determinations contained in the proposed permit reissuance may do so by the expiration date of the Public Notice. All written comments should be submitted to EPA as described in the Public Comments Section of the attached Public Notice.

After the expiration date of the Public Notice, the Director, Water Division, will make final determinations with respect to the permit reissuance. The tentative determinations contained in the draft permit will become final conditions if no substantive comments are received during the Public Notice period.

The permit will become effective 30 days after the final determinations are made, unless a request for an evidentiary hearing is submitted within 30 days after receipt of the final determinations.

The proposed NPDES permit and other related documents are on file and may be inspected at the above address any time between 8:30 a.m. and 4:00 p.m., Monday through Friday. Copies and other information may be requested by writing to EPA at the above address to the attention of the Water Permits Section, or by calling (206) 442-1214. This material is also available from EPA Idaho Operations Office, 422 West Washington Street, Boise, Idaho 83702.

1. Applicant

Callahan Mining Corporation  
11811 North Tatum Boulevard, Suite 4055  
Phoenix, Arizona 85028

Facility Location: Wallace, Idaho

Contact: Douglas England, Unit Manager  
(208) 752-1204

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2. Activity

Callahan Mining Corporation owns and performs exploratory work in a mining area known as Caladay Project in Wallace, Idaho. Wastewater discharged consists of surface water diverted underground for use in cooling and drilling and mine seepage water collected at various depths within the mine. The water collected is periodically pumped to the surface. A schematic of water flow for Caladay Project is included on page 5 of this fact sheet. The facility has a maximum flow of 0.58 mgd.

3. Receiving Water

Wastewater from Caladay Project is discharged to Daly Creek, a tributary of the South Fork Coeur d'Alene River. At the confluence with Daly Creek, the South Fork Coeur d'Alene River is designated by the Idaho Water Quality Standards and Wastewater Treatment Requirements, 16 IDAPA, Title 1, Chapter 2, Section 2110.01(v), to be protected for agricultural water supply and secondary contact recreation. Since Daly Creek is a tributary of the South Fork Coeur d'Alene River, it is also protected for the same uses.

4. Background

An NPDES permit was issued to the permittee on October 24, 1984, with an expiration date of October 23, 1989. An application for permit reissuance was received on April 21, 1989.

## 5. Performance

A review of the Discharge Monitoring Reports (DMRs) for the past three years shows that Caladay Project's discharge has been in compliance with the terms of its existing permit. A summary of the effluent data is listed below:

<u>Parameter</u>	<u>Unit</u>	<u>Average</u>
Flow	mgd	0.53
Total Suspended Solids, TSS	mg/l	2.0
Copper	mg/l	0.01
Zinc	mg/l	0.02
Lead	mg/l	0.02
Mercury	mg/l	0.0002
Cadmium	mg/l	0.003
pH	std. units	within 6.0 to 8.6

## 6. Basis of Limitations

### A. Heavy Metals

Since Caladay Project is currently not in production, it is considered an inactive mine. There are no effluent guidelines for discharges from inactive mines. Therefore, the limits are based on best professional judgement (BPJ). EPA has promulgated effluent guidelines that represent the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT) for mine drainage, 40 CFR §440.103(a). Since Caladay Project's wastewater consists only of mine drainage, the proposed permit contains limits that are based on the BAT effluent guidelines for mine drainage. These limitations are as follows:

<u>Parameter</u>	<u>Unit</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>
Copper	mg/l	0.30	0.15
Zinc	mg/l	1.5	0.75
Lead	mg/l	0.6	0.3
Mercury	mg/l	0.002	0.001
Cadmium	mg/l	0.10	0.05



## B. TSS and pH

The proposed permit includes TSS and pH limits which are based on BPJ. Effluent guidelines for TSS and pH reflecting the application of the best conventional pollutant control technology (BCT) have not been promulgated for the copper, lead, zinc, gold, silver, and molybdenum ores subcategory. However, EPA has promulgated effluent guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology (BPT), §440.102, and BAT effluent guidelines, 40 CFR §440.103. BAT guidelines and BPT guidelines are based on the same technology. This technology consists of settling ponds. In establishing BCT limits, EPA evaluates the economical treatment technologies beyond BPT. For this permit, the conventional pollutants of concern are TSS and pH. The technology to control these conventional pollutants is similar to what is required for BPT and BAT. To require any additional treatment beyond BPT (or BAT) would not be cost effective. Therefore, the TSS and pH limits are identical to what is required by BPT. The monthly average and daily maximum for TSS are 20 mg/l and 30 mg/l, respectively. pH shall be between 6.0 and 9.0 standard units.

## 5. Basis for Monitoring Requirements.

Effluent monitoring is required pursuant to 40 CFR §122.44(i) and is necessary to demonstrate compliance with permit limitations and to evaluate potential water quality impacts resulting from the discharge. Monitoring frequencies are based on the Agency's determination of minimum sampling frequency required to adequately monitor facility performance. Required sample types are based on the Agency's determination of the potential for effluent variability.

EPA has determined that monthly monitoring of the pollutants are necessary to adequately characterize the effluent. Direct seepage is not expected to violate permit limitations, but pumpage may. It is, therefore, proposed to allow the onset of pumping to "trigger" sampling so that samples adequately reflect the quality of the discharge during pumping. However, it may be possible for the facility to operate without pumping for extended periods. Therefore, the permittee is required to take the monthly samples during a pumping period. Samples may be taken during periods unaffected by pumping only when there is no pumping in that month. The permittee is also required to indicate in the DMRs whether the samples were taken during periods unaffected by pumping or during pumping.

In addition to effluent monitoring, the permittee is required to conduct receiving water monitoring semi-annually at two locations: downstream of outfall 001 and upstream of outfall 001. The receiving water monitoring shall be taken on the same days as the effluent samples to determine the impacts of the discharge on the water quality of Daly Creek. Monitoring shall be representative of both high flow and low flow conditions.

## 6. Other Conditions

This permit will expire five years from the effective date.

Placer Creek

Placer Creek Pump Station

Pump Station overflow

Wastewater

Wastewater cooling/recycling system

Wastewater not recycled 400 gpm (ave.)

Variable flow

Cooled/recycled water - variable flow

Mine dewatering system

Ground water influx - 250 gpm

Underground operations cooling, recirculation water

Underground service water 150 gpm

Variable flow

Daly Creek pump station

Pump station overflow

To South Fork Coeur d'Alene River

Daly Creek

SCHEMATIC OF WATER FLOW  
CALADAY PROJECT  
SHOSHONE COUNTY, IDAHO





